

**MICHIGAN DEPARTMENT OF CIVIL SERVICE  
JOB SPECIFICATION**

**ENGINEER MANAGER**

**JOB DESCRIPTION**

Employees in this job direct professional subordinates in a specific area of specialized engineering work. The employee works within general methods and procedures, exercises considerable independent judgment to select the proper course of action, and is required to review the work of subordinate level employees to ensure conformance with established guidelines, methods, procedures, and policies.

There are two classifications in this job. The classification level is determined by the application of the Professional Managerial Position Evaluation System.

**Position Code Title – Engineer Manager-1**

Engineer Manager 12

The employee functions as a first-line professional manager of a professional position in a standard work area or a first-line professional manager of nonprofessional positions in a standard work area.

**Position Code Title – Engineer Manager 2**

Engineer Manager 13

The employee functions as a first-line professional manager of professional positions in a standard work area, a first-line professional manager of a professional position in a complex work area, a first-line professional manager of nonprofessional positions in a complex work area, a first-line manager of a professional position in a standard work area receiving executive direction, or a first-line professional manager of nonprofessional positions in a standard work area receiving executive direction.

**Position Code Title – Engineer Manager 3**

Engineer Manager 14

The employee functions as a first-line professional manager of professional positions in a complex work area, as a first-line professional manager of professional positions in a standard work area receiving executive direction, a second line professional manager of professional positions in a standard work area, a first-line manager of a professional position in a complex work area receiving executive direction, or a first-line professional manager of nonprofessional positions in a complex work area receiving executive direction.

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### **Position Code Title – Engineer Manager 4**

#### **Engineer Manager 15**

The employee functions as a first-line professional manager of professional positions in a complex work area receiving executive direction, a second line professional manager of professional positions in a complex work area, a second line manager of professional positions in a standard work area receiving executive direction, or a third line professional manager of professional positions in a standard work area.

### **JOB DUTIES**

**NOTE:** The job duties listed are typical examples of the work performed by positions in this job classification. Not all duties assigned to every position are included, nor is it expected that all positions will be assigned every duty.

Selects and assigns staff, ensuring equal employment opportunity in hiring and promotion.

Coordinates activities by scheduling work assignments, setting priorities, and directing the work of subordinate employees.

Evaluates and verifies employee performance through the review of completed work assignments and work techniques.

Identifies staff development and training needs and ensures that training is obtained.

Ensures proper labor relations and conditions of employment are maintained.

Maintains records, prepares reports, and composes technical correspondence relative to the work.

Writes contracts for labor, materials, and equipment for construction projects; prepares and authorizes final payment of contractors.

Directs the establishment of cost records, charges, and accounting for construction projects.

Reviews engineering reports, plans, and specifications for engineering systems and equipment; new and/or modified construction, facilities, highways, bridges, equipment, etc., for conformance with accepted program standard.

Approves, reviews, and inspects materials and completed phases of work in connection with any public or private utility, structure, building, machine, highway, bridge, equipment, process, work, or project as a final authority.

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Maintains liaison activities with other departments, state agencies, and with local units of government including contractors, public utilities, federal and local governments, local health departments, public safety, occupational safety, and/or health organizations.

Directs and coordinates staff participation in formal proceedings.

Determines specialized engineering program needs and opportunities in an assigned area and coordinates with programs in other districts, divisions, etc.

Analyzes and interprets laboratory and field data from investigations.

Reviews periodic progress reports from project engineers and architects on buildings under construction, and attends and participates in progress meetings.

Compiles and analyzes data for use in regulating rates of public utilities in the state.

Evaluates and makes recommendations concerning changes in contract documents and insures that authorized changes are carried through.

Directs and participates in studies of specialized engineering problems, environmental health, noise, and/or pollution control problems in various locations.

Make periodic inspections of equipment and systems to observe and make recommendations on operational procedures.

Develops rules, codes, and standards for the regulation of public utilities and makes recommendations concerning regulations for standards of public utility service and safety.

Reviews testimony and documents developed by staff and develops own testimony and documents to be presented at hearings.

Participates in pre-construction meetings with engineers and contractors to discuss construction scheduling, methods of construction, and problems that may be encountered on the project.

Advises and/or consults with architects, engineers, owners, and contractors regarding layout, design, code requirements for electrical or mechanical installations; or preliminary layout, construction procedures, and code requirements that apply to building projects.

Performs related work appropriate to the classification as assigned.

**JOB QUALIFICATIONS**

**KNOWLEDGE, SKILLS, AND ABILITIES**

**NOTE:** Considerable knowledge is required at the 12-level and thorough knowledge is required at the 13-15 levels.

Knowledge of the principles and practices of a specialized field of engineering.

Knowledge of mathematics and mathematical tables used in engineering work.

Knowledge of the standards, codes, and regulations pertaining to the construction and maintenance for structures and facilities.

Knowledge of the basic practices used in the maintenance, operation, and administration of utility companies.

Knowledge of the scientific principles relative to transportation and/or environmental control.

Knowledge of the equipment, testing, and investigative/inspection methods and laboratory procedures related to the specific field of engineering.

Knowledge of the items involved in the establishment and operation of public utility rates.

Knowledge of state, federal, national, and local laws and building codes related to the work.

Knowledge of accepted practices followed in preparing plans, estimates, specifications, and contracts for engineering work.

Knowledge of modern materials, methods, and techniques of design, construction, installation, and maintenance of structures and facilities, especially those related to the specific field of engineering.

Knowledge of the principles of mechanics, hydraulics, and structures.

Knowledge of the elements of cost in construction and maintenance including the determination of unit cost records.

Knowledge of engineering design and related drafting practices.

Knowledge of building construction processes and procedures, equipment, tools, materials, and their application.

Knowledge of the technical and administrative problems involved in government control of public utility companies.

Knowledge of training and supervisory techniques.

Knowledge of equal employment opportunity and affirmative action practices and policies.

Knowledge of employee policies and procedures.

Knowledge of labor relations.

Skill in the use of engineering instruments and tools, including computers and engineering work stations.

Ability to supervise and evaluate employees.

Ability to organize and set priorities for work assignments, and to assign and explain them to subordinates.

Ability to perform specialized technical research work and studies and to make recommendations on engineering problems or prepare technical reports and articles.

Ability to make mathematical computations and to design engineering projects.

Ability to read, interpret, and/or prepare engineering plans, specifications, blueprints, and technical reports.

Ability to make engineering designs and to prepare complete plans for projects.

Ability to collect and analyze complex engineering data in general, and related to the specific field of engineering.

Ability to analyze and evaluate laws, rules, policies and procedures, and is able to make recommendations as to action.

Ability to do cost analysis and estimating on construction projects.

Ability to determine if completed structures complies with specifications.

Ability to communicate effectively.

Ability to organize, evaluate, and present information effectively.

Ability to serve as an expert witness.

Ability to promote and maintain favorable public relations.

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Ability to withstand vigorous and prolonged cross-examination in adversary rate proceedings.

Ability to maintain records, prepare reports, and compose correspondence related to the work.

### **Working Conditions**

Work may be performed in a normal office or in field locations and may require movement from one location to another, as well as exposure to working along busy highways and in adverse weather conditions.

### **Physical Requirements**

None.

### **Education**

Possession of a bachelor's degree in engineering.

### **Experience**

#### **Engineer Manager 12**

Three years of experience as a professional engineer including one year of experience equivalent to an Engineer P11.

#### **Engineer Manager 13**

Two years of experience equivalent to an Engineer P11.

OR

One year of experience equivalent to an Engineer 12, Engineering Specialist 12, Engineer Manager Licensed 12, or Engineering Licensed Specialist 12.

#### **Engineer Manager 14**

Three years of experience equivalent to an Engineer P11.

OR

Two years of experience equivalent to an Engineer 12, Engineering Specialist 12, Engineer Manager Licensed 12, or Engineering Licensed Specialist 12.

OR

One year of experience equivalent to an Engineer Manager 13, Engineering Specialist 13, Engineer Manager - Licensed 13, or Engineering Licensed Specialist 13.

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### **Engineer Manager 15**

Three years of experience equivalent to an Engineer 12, Engineering Specialist 12, Engineer Manager Licensed 12, or Engineering Licensed Specialist 12.

**OR**

Two years of experience equivalent to an Engineer Manager 13, Engineering Specialist 13, Engineer Manager Licensed 13, or Engineering Licensed Specialist 13.

**OR**

One year of experience equivalent to an Engineer Manager 14, Engineering Specialist 14, Engineer Manager Licensed 14, or Engineering Licensed Specialist 14.

### **Engineer Manager-Licensed 16**

Three years of experience equivalent to an Engineer Manager 13, Engineering Specialist 13, Engineer Manager Licensed 13, or Engineering Licensed Specialist 13.

**OR**

Two years of experience equivalent to an Engineer Manager 14, Engineering Specialist 14, Engineer Manager Licensed 14, or Engineering Licensed Specialist 14.

**OR**

One year of experience equivalent to an Engineer Manager 15, Engineering Specialist 15, Engineer Manager 15, or Engineering Licensed Specialist 15.

### **Special Requirements, Licenses, and Certifications**

#### **Engineer Manager Licensed 12-16**

Possession of a registered professional engineer license.

**NOTE:** Equivalent combinations of education and experience that provide the required knowledge, skills, and abilities will be evaluated on an individual basis.

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**JOB CODE, POSITION TITLES AND CODES, AND COMPENSATION INFORMATION**

<b><u>Job Code</u></b>	<b><u>Job Code Description</u></b>
ENGINRMGR	Engineer Manager

<b><u>Position Title</u></b>	<b><u>Position Code</u></b>	<b><u>Pay Schedule</u></b>
Engineer Manager 1	ENGRMGR1	NERE-115
Engineer Manager 1 (PP)	ENGRMGR1	NERE-049P
Engineer Manager 2	ENGRMGR2	NERE-116
Engineer Manager 2 (PP)	ENGRMGR2	NERE-050P
Engineer Manager 3	ENGRMGR3	NERE-117
Engineer Manager 3 (PP)	ENGRMGR3	NERE-051P
Engineer Manager 4	ENGRMGR4	NERE-118
Engineer Manager 4 (PP)	ENGRMGR4	NERE-052P

ECP Group 3  
Revised 12/11/00  
EAF/VLWT/MD/BHH